

### **REMARKS**

The Office Action of August 24, 2005, has been received and its contents carefully noted. Claims 1-37 are currently pending, of which claims 1-4 and 32 are rejected and claims 5-31 and 33-37 stand objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 1 and 6 have been amended. Claims 3-5 have been cancelled. Claims 38-40 are new. This amendment does not add new matter or present any new issues that would require any further consideration and/or search by the Examiner. Accordingly, entry of the present amendment is respectfully requested. Reconsideration and withdrawal of all pending objections and rejections in view of the above amendments and following remarks is respectfully requested.

### **ALLOWABLE CLAIMS 5-31 AND 33-37**

Applicants appreciate Examiner's indication that claims 5-31 and 33-37 contain allowable subject matter (See Office Action, page 2, number paragraph 1). Specifically, claims 5-31 and 33-37 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form. Claims 1 and 6 have been amended to incorporate the claim language from dependent claims 3-5. Accordingly, claims 3-5 have been cancelled.

Accordingly, Applicants submit that claims 6-31 and 33-37 are in condition for allowance.

### **REJECTIONS OF CLAIMS 1-4 AND 32 UNDER 35 U.S.C. 103(a)**

Claims 1-4 and 32 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent Publication No. 2003/0183854 to Kato *et al.* (hereinafter

"Kato") in view of JP-04-279064 to Ueda (hereinafter "Ueda"). Applicants respectfully traverse the rejection with respect to these claims.

Claim 1 of the present application, as amended, recites: "...at least two or more thin film transistors including semiconductor active layers having simultaneously formed channel regions, wherein a thickness of the channel regions of the thin film transistors are different from each other, wherein the semiconductor active layer is formed using polycrystalline silicon, and a size of crystal grain on the channel region, which has a relatively thinner thickness, of the switching thin film transistor is larger than a size of the crystal grain on the channel region of the other thin film transistor, wherein the polycrystalline silicon is formed in a crystallization method using a laser, and wherein the channel regions of the thin film transistors are formed by irradiating the laser to the regions simultaneously."

In the Office action, on page 2, numbered paragraph 3, the Examiner acknowledges that Kato fails to disclose the two different channel thicknesses disclosed in independent claim 1 of the present application. The Examiner alleges that Ueda discloses such a feature and asserts that independent claim 1 is unpatentable over Kato in view of Ueda. However, the abstract section of Ueda clearly states, "The TFT 15 of a displaying section and the TFT 16 in a driver circuit for driving are manufactured in **different processes**." Therefore, Ueda teaches against a flat panel display comprising "... semiconductor active layers having simultaneously formed channel regions, wherein a thickness of the channel regions of the thin film transistors are different from each other, wherein the semiconductor active layer is formed using polycrystalline silicon, and a size of crystal grain on the channel region, which has a relatively thinner thickness, of the switching thin film transistor is larger than a size of the crystal grain on the channel region of the other thin film transistor, wherein the polycrystalline silicon is formed in a crystallization method using a laser, and wherein the channel regions of the thin film transistors are formed by irradiating the laser to the regions simultaneously", as recited in amended claim 1 of the present invention.

Therefore, for at least the reasons discussed above, amended independent claim 1 of the present application patentably distinguishes over the combination of Kato and Ueda.

Accordingly, it is respectfully requested that the rejection of independent claim 1 be withdrawn.

Claims 2 and 32 depend from independent claim 1 and are patentable for at least the reasons discussed above. Claims 3-4 have been cancelled. Accordingly, it is respectfully requested that the rejections of claims dependent claims 2-4 and 32 be withdrawn.

#### **NEW CLAIMS 38, 39 AND 40**

Claim 38 is newly added and recites patentably distinguishing features of the present invention. Specifically, claim 38 includes elements of independent claim 1 and dependent claim 6, which the Examiner indicated was allowable.

Claim 38, for example, recites, "... wherein the thin film transistors include a switching thin film transistor for transmitting a data signal, and a driving thin film transistor for operating the light emitting device so that a predetermined current flows in the emitting device according to the data signal, and where the thickness of the channel region of the switching thin film transistor is thinner than the thickness of the channel region of the driving thin film transistor." Since none of the prior art of record teaches or suggests at least this limitation, Applicant respectfully requests that new claim 38 be allowed.

Claim 39 is newly added and recites patentably distinguishing features of the present invention. Specifically, claim 39 includes elements of independent claim 1 and dependent claim 12, which the Examiner indicated was allowable.

Claim 39, for example, recites, "... wherein the light emitting device is included in each of plurality of sub-pixels having at least two different colors, the thin film transistors include a driving thin film transistor connected between the sub-pixel and the light emitting device to supply the electric current to the emitting device, and the thickness of the channel regions of the driving thin film transistors are different for each of the colors of the sub-pixels. Since none of the prior art of record teaches or suggests at least this limitation, Applicant respectfully requests that new claim 39 be allowed.

Claim 40 is newly added and recites patentably distinguishing features of the present invention. Specifically, claim 40 includes elements of independent claim 1 and dependent claim 24, which the Examiner indicated was allowable.


Claim 40, for example, recites, "... a pixel area including a plurality of light emitting devices, and a circuit area controlling a signal applied to the pixel area, wherein the thin film transistor includes a pixel unit thin film transistor, which is located on the pixel area, and a circuit unit thin film transistor, which is located on the circuit area, wherein the thickness of the channel area of the circuit unit thin film transistor is thinner than the thickness of the channel area of the pixel unit thin film transistor." Since none of the prior art of record teaches or suggests at least this limitation, Applicant respectfully requests that new claim 40 be allowed.

**CONCLUSION**

Applicants submit that a full and complete response has been made to the pending Office Action and respectfully submit that all of the stated objections and grounds for rejection have been overcome or rendered moot. Accordingly, Applicants respectfully submit that all pending claims and all new claims are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is thus respectfully requested to pass the above application to issue.

Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact the Applicant's undersigned representative at the number below to expedite prosecution. Prompt and favorable consideration of this Reply is respectfully requested. Applicants respectfully request that a timely Notice of Allowance be issued for this application.

Respectfully submitted,

  
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